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ABSTRACT

This paper reports on a study conducted to determine if staffing changes were necessary at the information desk at the main branch of the Cleveland Heights-University Heights Public Library (Ohio). Questions addressed included: (1) What times are busiest in the library? (2) Should there be changes in staffing the reference desk that could lead to increased patron use of this service? and (3) Is the survey form used to collect reference desk transaction data understood and used correctly by those who are completing it? The study analyzed two sets of data. The first set consisted of 52 weeks of data collected using a daily tally sheet for reference queries that used hash marks to record how many times different types of transactions were completed. The second set was a validity test on the tally sheets; a three-page questionnaire asking procedural questions and questions differentiating between types of transactions was given to all 16 people who worked at the reference desk. Findings indicated that changes were needed to better handle the busier times at the desk, and that the tally sheet has validity problems. Results are presented in table form. The tally sheet, questionnaire, and cover letter are appended. Contains 15 endnotes. (DLS)

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Staffing Pattern Questions at the Cleveland Heights - University Heights Public Library

A Master's Research Paper submitted to the
Kent State University School of Library Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Aaron Schlesinger

October, 1997

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ABSTRACT

The purpose of this study was to find out if staffing changes were needed at the information desk of the Cleveland Heights - University Heights Public Library on Lee Road.

The study suggests that changes need to be implemented to better handle the busier times at the desk. It is shown that certain times of the week are busier and therefore the library needs better staffing to handle those times. Also it can be seen that the library becomes busier while school is in session and therefore needs to figure out better ways to handle the extra workload during those months. Finally it is shown that the measurement tool used for marking reference questions has validity problems.

Libraries that are trying to figure out better staffing patterns for their information desk should find this investigation of the Cleveland Heights - University Heights Public Library beneficial.

Master's Research Paper by

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B.B.A., Cleveland State University, 1993

M.L.S., Kent State University, 1997

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I. INTRODUCTION

Staffing a reference desk can be one of the most challenging jobs that a manager faces. Many patrons come in to the library ready to ask a question only to find the desk unoccupied. There are certain times in a library that are much busier than others. Finding out which times those are can aid the manager in better staffing of the desk. Monetary constraints have become a factor in staffing. Many libraries all over the country have faced budget crunches that have made adequate staffing an even tougher problem to tackle.

The Cleveland Heights-University Heights Public Library serves a community of about fifty thousand people. There is a Main branch along with three community branches. The Main branch is open seven days a week, with hours from 9-9 on weekdays, 9-5:30 on Saturdays, and 1-5 on Sundays. The reference desk is staffed with either librarians or library assistants. The pay scale range for the librarian $13.98 per hour to $18.21 per hour depending on how long the person has worked at the library. The pay for a library assistant ranges from $11.51 per hour to $14.55 per hour. These costs are significant and having people work the reference desk when the library is not busy is a waste of resources. Librarians at the reference desk usually work in a desk shift of 3-4 hours. This can help to impede giving good reference help. Bunge notes that most librarians should work no more than two hours at the reference desk. (1) The library must be able to use these people at times when the library is busy.

What are some of the reasons why use of the reference department has increased? New formats is one answer: videocassettes, audiocassettes, and compact discs. The

biggest factors though, which can keep librarians away from the desk for long periods of time, is electronic searching. Between CD-ROM's and the Internet, librarians now have a much wider array of resources in which to find answers. Many patrons expect "quick" answers from these electronic databases, but as most people who have used them know, this is unrealistic. Due to these new places to search, the librarian now spends even more time away from the reference desk.

Librarians at Cleveland Heights field questions from customers in two ways: in-person and on the telephone. Both types of questions take time, and therefore a customer service committee at the library has put a time limit of 3-5 minutes per question on the librarians. Librarians are also asked to do other work at the reference desk which includes selection of materials. This involves the librarian looking through different buying tools and choosing which items to purchase. This can be a very time-consuming process, and the staff feels rushed in getting this work done while also trying to answer questions from the public.

The purpose of this study was to find out if there were better ways of staffing the reference desk. Some of the questions that have been addressed are as follows:

1) What times are busiest in the library?
2) Should there be changes in staffing the reference desk that could lead to increased patron use of this service?
3) Is the survey form that is used to collect reference desk transaction data understood and used correctly by those who are completing it?

Definition of Terms

Daily Tally Sheets - A survey form that is used to count four different types of reference transactions. They are as follows : Directional-In-Person; Directional-Telephone; Reference-In-Person; Reference-Telephone. (see Appendix)

Directional-In-Person - In-person questions that do not rely on reference sources for their answer.

Directional-Telephone - Telephone questions that do not rely on reference sources for their answer.

Reference-In-Person - Any request for information that requires the use of materials or the professional judgment of reference staff to answer the question.

Reference-Telephone - Any request for information that requires the use of materials or the professional judgment of reference staff to answer the question.

Limitations of the Study

This study was limited to the Adult Services Reference Department of the Cleveland Heights-University Heights Public Library. These findings may not be applicable to any other library, whether public, special, or academic. These findings will only cover a specified period of time and may not be generalizable to other periods.

II. LITERATURE REVIEW

Cost of Reference

Library administrators are being asked to create better staffing solutions every day. Diane Tebbetts says that administrators must become more accountable for the accurate predictions of costs of different services in libraries, such as reference, and also consider alternative approaches that may work better than those in place already. They must then make recommendations based on all relevant data. (2) Deborah Rinderknecht states that most library budgets have either stayed the same or gotten smaller over the past decade. Libraries have now had to staff a busier reference desk with either the same or less people. (3) Working against shrinking budgets is the fact that reference services have always been considered high maintenance according to James Kuhlman. His study shows that reference functions in certain college and university libraries can account for twenty percent of the total budget. (4)

Libraries have always been considered a beneficial part of society, but in today's electronic society, people can go elsewhere for their informational needs. With commercial services becoming a bigger part of the information society, Karen Storin Summerhill states that librarians must reassess their service priorities and service delivery methods in order to operate efficiently and compete effectively with these new competitors. (5) She goes on to say that information and reference services have become a commodity that is now for sale. Companies now deliver services that used to be exclusive to libraries. (6) Since services are now available elsewhere, it has become less necessary for people to frequent the library.

Measuring Staffing Needs

According to Charles Terbille, reference services can be measured using a queuing theory. Queuing means that people are stacked up in the order they came in. Each individual must wait until the person who came in before him has asked his question. His study reveals that each person must wait for an unspecified length of time when coming up to the reference desk when it is busy. This time will not be the same for each individual, because factors such as how many librarians there are to help this person, as well as the number of patrons ahead of him will all factor in. His study uses potential scenarios that could occur in any given library. First, the customer comes in to the library and goes up to the reference desk. Then he gets into the queue to wait for his turn to ask a question. If there are not enough librarians to take each individual as they come up to the desk, then the person has to wait. (7) There is no perfect way to tell how busy a library is going to be at any given moment, but queuing statistics can give people an idea of which times are busier than others.

Adrian Taylor states that data must be collected to figure out if staffing needs to be increased or reallocated. In reference service areas this usually means keeping statistics that occur at reference points. These data should help predict future demand. This is accomplished by charting past activity and seeing if a trend develops. In doing this, demand by time and day should be collected. Population growth in the area the library serves should also be determined. If there is growth then one could assume that the

reference desk would be busier. Once these data are collected, one can determine if staff should be reallocated. (8)

Thomas R. Cummins says that one staffing process is the evaluation of the effectiveness of the staff's productivity. He states that the staff should not just be busy, but be able to meet the community's needs. A staffing study is one way to figure out how best to serve the community. Cummins' study consists of four major parts. They are as follows: 1) Identify the quality of service, programs and collections that will be made available to the community. 2) Predict the number and kind of staff needed to produce the quality of library service required. 3) Arrange the staff in specific configurations. It also includes developing assignment patterns to make sure that there are enough staff available to meet the hours and days the library is open. 4) Evaluate the effectiveness of the staff's productivity. Cummins also states that one of the key features in his study is technology. One must look at how technology is changing the way reference service is provided. Is it allowing librarians to get answers more quickly, thus allowing for less staffing, or is technology actually slowing us down? (9)

Marjorie E. Murfin states that staffing a reference desk involves the total hours of reference desk service as well as the total number of people available to staff it. (10) She notes that it is important to understand and document how demand, workload capacity, and accessibility are related to each other in any particular library. She says that reference transaction counts can be used as a method for documenting how busy a library is. (11) With these factors in mind, managers should be able to make sound decisions about hours and staffing plus understand other aspects of reference desk activity.

Charles Bunge has done a study on trying to find norms for reference desk staffing in academic and public libraries. In one study, Bunge sent questionnaires to different libraries that asked questions about the length of the reference desk shift as well as the proportion of the work week spent at the desk by reference librarians. He found that shifts in libraries tend to be similar. Most full time librarians work between 20-24 hours per week at the reference desk. (12) Most public librarians work a 3-4 hour shift while at the desk. Bunge states that for the most part people tend to be able to handle two hours at a time at the reference desk. He also states that they are willing to work longer hours on nights and weekends. The longer one works, the harder it is for them to continue to give high levels of service. (13)

Validity of Staffing Surveys

Validity is a very important factor when doing research. Weech talks about two different types of validity which is introduced in the book, *Output Measures for Public Libraries, A Manual for Standardized Procedures*. He says there is internal validity and external validity. The concern with whether one is measuring what we intend to measure is the internal validity. The ability to generalize from the data with some assurance that it is representative of the population from which it was drawn is external validity. A reference transaction fill rate is the proportion of transactions completed successfully on the same day that the question is asked, according to the librarian's judgment. These rates may have problems with internal validity because these rely on the librarian's judgment. If a question is interpreted the wrong way then the outcome will not be accurate. (14) Clear criteria for improved validity must be followed. Murfin states that

there must be good definitions for a survey so that no transaction is counted more than once, otherwise statistics may not be interpreted and applied correctly. (15)

III. METHODOLOGY

This study involves the adult services reference desk at the Main branch of the Cleveland Heights-University Heights Public Library. Neither the children's department nor individual branches of the system have been included.

The study analyzed two different sets of data. The first data set consisted of data collected using a daily tally sheet for reference queries (see Appendix A). These sheets had been in use for one year, and used hash marks for counting each transaction that took place at the reference desk. Each time a transaction was completed at the reference desk a hash mark was placed on the daily tally sheet. The hash marks were placed within one of four categories. Those were Directional-In-Person, Directional-Telephone, Reference-In-Person, Reference-Telephone (See Definitions.). Fifty-two weeks of data were used. The data collected were analyzed to show which days of the week were busier than others as well as which time slots during the day were the busiest. The numbers were also used to show which months of the particular year surveyed were the busiest.

The second set of data was a validity test on the tally sheets. A three-page questionnaire (see Appendix B) under the cover of a letter of introduction (see Appendix C) was given to all individuals who staffed the reference desk, both full and part time. There were a total of sixteen questionnaires given out. No names were attached to any questionnaire so anonymity was protected. The questionnaires were distributed and collected by hand. Individuals were not required to fill out the questionnaire if they did not want to. Those who did participate were asked questions such as "How do you use the online catalog?", or "Where are the compact discs?", and then asked to differentiate

between the two main tally sheet criteria: reference or directional. There was no need to differentiate between In-Person or Telephone, since those should not be misinterpreted by the people filling in the tally sheets. The survey was created by using an examples sheet, which consisted of questions and the correct place to mark your response. This examples sheet was created by management, who are the ones that created the daily tally sheets. Similar questions to the examples sheet questions were then drawn up for this survey. Results revealed if people were interpreting the tally sheet categories differently from what was expected by the management.

IV. FINDINGS

A. Validity of Staffing Surveys

The first part of this study shows the results of a survey taken of sixteen librarians (both professional and pre-professional) working the information desk. The survey consisted of twelve questions that were created by this researcher. These questions were analyzed to determine if the daily tally sheets used at the library were valid measures of the number of reference questions asked. The response rate of this survey was 100%. The data gathered are summarized in Table 1 below where N equals the total number of responses per question and f equals the frequency of correct answers.

Table 1.

Tally survey response rate.

Question number	n correct	% correct
1) How to use Internet search engines	15	94
2) How late is the library open	10	62
3) How to operate the printer	6	38
4) Please place a request on a book	1	6
5) Find a phone number in Chicago	16	100
6) Sign someone up to use the computer center	14	88
7) Tell who the author is of a particular book	16	100
8) Show where the magazines are	16	100
9) Get information on local schools	16	100
10) Give someone today's newspaper	10	62
11) Transfer a call to the computer center	15	94
12) A copy of USA Today is returned	15	94

Generally, there was agreement as to what constituted a reference or directional question. However there were some interesting divergences. In one-third of the cases 25% or more of the respondents erred in categorizing the question.

Question number two which states, "How late is the library open tonight?" is a pretty basic question that should have been answered as a directional, but 38% of the staff members thought of it as a reference question. Question number three had 62% wrong answers. It asked, "How do I operate this printer?" It can be seen how one would interpret this as a reference question because the librarian would show the patron how to make the printer work, but it has been stated very clearly in the definitions distributed to staff as a regular part of staff training that it should be considered directional. Question number four stumped the most people with only 6% of the people surveyed getting it correct. The question states, "A customer asks will you please place a reserve on John Grisham's The Rainmaker for me?", and then asks for an answer. Most people answered this as a reference question while the directions state that this should be a directional. Finally, question number ten asks, "May I please have a copy of today's Plain Dealer?" Only 38% of the respondents answered this as a directional instead of reference. It can be seen on this last question how people could get confused, because as seen in question twelve returning a copy of a newspaper is counted as a directional question.

The overall percentage of correct answers was 78%. This is an error rate of almost 22%. One possible reason for this error rate, as determined by this researcher, is that many individuals taking this survey didn't know that there was an official set of definitions on how to answer the questions. To ensure better results in the future the definitions

should be given to every individual who took this survey, and then they should be re-evaluated at a later date to see if the percentage improves.

B. Measuring Staffing Needs

The second part of the findings consists of data that were tabulated for the period covering June 1996 - May 1997, pertaining to the number of questions asked at the information desk. The data have been gathered into three different tables. The information preceding the tables shows the number of man hours that were used to staff the information desk during particular times.

1) Allocation of hours used staffing the reference desk.

Table 2 shows the number of hours per day, and week, that librarians are manning the information desk. To get the number of hours per day selected staff schedules were examined. These schedules were chosen intuitively by to get a good cross-section of the year and showed the different scheduling patterns that existed throughout the year. The schedules show the total number of hours that the desk was manned for each day of the week during certain monthly time periods. As can be seen in Table 2 below, there are more hours allotted to the desk during different times of the year. January through May are given extra hours on Saturdays, and the periods covering November through May given extra hours on Sundays. The extra hours on Sundays started at the library in November during this study. There is also an increase in the number of hours that the desk is manned during certain days of the week. Tuesdays and Wednesdays are given extra hours in the three periods covering September through May. One possible

explanation is that these extra hours have been added to handle the increase in questions due to school assignments. It can be seen from these emerging patterns that the months when school is in there are more hours allotted to covering the reference desk on Tuesdays, Wednesdays, Saturdays, and Sundays. From there we can conclude that since there are a fixed number of total staff hours that can be used during the week, using more hours on Tuesdays, Wednesdays, and the weekend will give the management less man hours to staff with on Mondays, Thursdays, and Fridays. It can also be seen that Mondays are given the most hours of any day during the year. One possible reason for this is that Mondays are always busy either when school is in or out.

Table 2.

Man hours used to staff the information desk.

June-Aug. 1996	Total hours per day	Sept.-Oct. 1996	Total hours per day
Monday	44	Monday	44
Tuesday	40.5	Tuesday	44
Wednesday	40.5	Wednesday	44
Thursday	40.5	Thursday	40.5
Friday	40.5	Friday	40.5
Saturday	29.5	Saturday	29.5
Sunday	16	Sunday	16
Total hours	251.5	Total hours	258.5
Nov-Dec. 1996	Total hours per day	Jan-May 1997	Total hours per day
Monday	44	Monday	44
Tuesday	44	Tuesday	44
Wednesday	44	Wednesday	44
Thursday	40.5	Thursday	40.5
Friday	40.5	Friday	40.5
Saturday	29.5	Saturday	35
Sunday	20	Sunday	20
Total hours	262.5	Total hours	268

2) Number and type of questions asked of each librarian.

Table 3 shows which days are busier by getting the average number of questions asked per librarian, per hour at the information desk over the one year period. These numbers were calculated by taking the totals in Table 4 and then dividing by three, which is the number of time periods in a given day during the week. On Saturday the total was divided by two, and on Sunday it was divided by one. As can be seen Mondays and Tuesdays are the busiest days during the week with 14.62 and 14.40 questions per librarian, per hour. It then tapers off until the weekend when Saturday jumps to 14.07 and Sunday to a large 17.36 questions asked per librarian, per hour. One explanation that the first two days of the week as well as the weekends are the busiest times may possibly be due to students. It is possible that many new homework assignments are given out at the beginning of the week and that accounts for many individuals coming in to get needed materials to do these assignments. Also, many students wait until the last minute to do their assignments and therefore the weekend becomes busier. From this table it can be concluded that there should be less hours of staffing for direct reference service during the middle of the week and higher amounts of staffing at the beginning as well as the weekends.

It can also be seen that there is approximately one question being answered every four minutes. This is significant because as mentioned earlier, staff are allotted 3-5 minutes to answer a question. This four minute mark fits into this time frame, but it leaves very little room for anything else to be done at the reference desk. This causes problems in

expectations by management when staff members are also supposed to be selecting materials while working on the desk.

Table 4 shows that over 80 percent of all the questions asked during this time period were reference questions. Taking into consideration that a reference question usually takes more time to answer then a directional question, it can be concluded that the staff is answering questions that take longer and therefore use the full 3-5 minute time limit more often.

Table 3.

Daily comparisons of questions asked per librarian, per hour at the information desk.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	14.62	14.40	13.66	13.52	11.2	14.07	17.36

Table 4.

Monthly comparisons of percentage of reference questions to directional questions.

	Reference (%)	Directional (%)
June	84	16
July	87	13
August	83	17
September	85	15
October	81	19
November	82	18
December	84	16
January	84	16
February	83	17
March	83	17
April	83	17
May	83	17

Table 5 shows the comparison of reference to directional questions after the figures have been adjusted for errors. As mentioned in the validity survey there was a 22% error rate amongst the librarians for all the questions asked. Of these 19% were marked for reference when they should have been marked as directional. Table 5 shows the percentages of reference to directional questions after the 19% figure has been deducted from the reference column. This shows a more accurate representation of the percentage of reference questions asked at the desk. It can be seen now that over 60% of the questions asked are reference instead of 80%. This is important because generally reference questions take longer to answer then do directional questions and therefore the librarians may be at the desk more of the time.

Table 5.

Monthly comparisons of reference questions to directional questions after being adjusted for error.

	Reference-Adjusted (%)	Directional-Adjusted (%)
June	65	35
July	68	32
August	64	36
September	66	34
October	62	38
November	63	37
December	65	35
January	65	35
February	64	36
March	64	36
April	64	36
May	64	36

Table 6 breaks down the numbers into even more detail and shows the questions asked per hour, per librarian in specific times of the day. These figures were calculated by taking the questions asked for each day of the week, adding them all together, and dividing by the number of times that particular day of the week was open during the year. There are a few points of interest to be made here. One such point is that Monday mornings tended to be the busiest with the count of questions slowing down throughout that day. This factor may work against the school factor a bit, but there may possible be many people at businesses at the beginning of the week who have questions that need to be answered. Also, even though the count drops throughout the day, it isn't that large of a drop. Friday is the quietest day of the week in regards to the number of questions asked while Saturday mornings are much busier than the afternoons. Sunday still remains one of the busiest times in the library. The weekend again shows an increase in questions which can be attributed to students trying to get assignments done. The pattern that develops here is the same as in the previous table. Management must staff higher on both the weekends and the early days of the week.

Table 6.

Hourly comparisons of questions asked per librarian, per hour at the information desk.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9-1	15.76	14.76	13.19	14.51	12.16	17.38	
1-5:30	14.86	13.87	13.33	12.53	11.15	10.75	17.36
5:30-9	13.24	14.58	14.45	13.51	10.29		

Table 7 shows the monthly questions asked per librarian, per hour at the information desk. These numbers were calculated by taking the number of questions asked per each day of the week, per month, and then dividing by the number of hours that the desk was manned. To get the total column, all the days of the week were added together and then divided by seven. Once again a pattern emerges showing that the summer months have less questions asked than do the months school is in session. October and November are busy months, while December's number taper off. This may be due to the holidays, plus winter break for the students. The amount of questions pick right back up in January and continue that way right through April when school assignments are heaviest. Once again these patterns show that management must be ready to staff the information desk at higher levels during the school year.

Table 7.

Monthly comparisons of questions asked per librarian, per hour at the information desk.

	Monday	Tuesday	Wed.	Thursday	Friday	Saturday	Sunday	Total
June	9.52	12.98	13.51	11.76	8.72	9.69	15.95	11.73
July	13.09	13.85	13.09	12.74	10.70	11.20	16.74	13.06
Aug.	14.28	13.60	13.17	11.99	10.29	10.92	15.02	12.75
Sept.	14.08	13.23	13.79	11.05	10.05	16.23	18.29	13.82
Oct.	15.46	14.74	13.19	13.46	10.92	16.14	22.83	15.25
Nov.	15.29	12.20	12.66	12.76	11.59	15.71	18.24	14.06
Dec.	14.49	12.79	12.03	13.90	10.31	13.70	13.62	12.98
Jan.	15.79	14.64	15.17	15.39	13.84	15.14	19.06	15.58
Feb.	14.42	16.64	14.02	13.69	11.30	16.31	18.68	15.01
Mar.	17.59	16.91	13.61	14.80	12.63	15.94	21.55	16.15
Apr.	16.56	15.31	14.17	15.15	12.46	16.40	16.06	15.16
May	14.72	13.98	14.09	11.90	11.17	12.80	13.63	13.18

Table 8 shows the reference questions asked per librarian, per hour at the reference desk. These figures were obtained by taking the figures in Table 7 and multiplying them by the Reference-Adjusted rates in Table 5. It can be seen from the table that the librarians are answering approximately one reference question every six minutes throughout the year. This can become very problematic when the librarians not only have to handle patrons at the desk, but also selection development. When it is figured that an average reference question takes 3-5 minutes to answer there is not much time left for the librarians to be doing anything else at the reference desk.

Table 8.

Monthly comparisons of reference questions asked per librarian, per hour at the reference desk.

	Monday	Tuesday	Wed.	Thursday	Friday	Saturday	Sunday	Total
June	6.19	8.44	8.78	7.64	5.67	6.30	10.37	7.62
July	8.90	9.42	8.90	8.66	7.28	7.62	11.38	8.88
Aug.	9.14	8.70	8.43	7.67	6.59	6.99	9.61	8.16
Sept.	9.29	8.73	9.10	7.29	6.63	10.71	12.07	9.12
Oct.	9.59	9.14	8.18	8.35	6.77	10.01	14.15	9.46
Nov.	9.63	7.69	7.98	8.04	7.30	9.90	11.49	8.86
Dec.	9.42	8.31	7.82	9.04	6.70	8.91	8.85	8.44
Jan.	10.26	9.52	9.86	10.00	9.00	9.84	12.39	10.13
Feb.	9.23	10.65	8.97	8.76	7.23	10.44	11.96	9.61
Mar.	11.26	10.82	8.71	9.47	8.08	10.20	13.79	10.34
Apr.	10.60	9.80	9.05	9.70	7.97	10.50	10.28	9.70
May	9.42	8.95	9.02	7.62	7.15	8.19	8.72	8.44

CONCLUSION

Evaluation of reference question measurement tool

As can be seen from the findings the tally survey had a 22% error rate. A possible reason for this high rate was the fact that management had not given their definitions lists to staff before the tally surveys were done. Many staff marked the sheets with what they felt was their "best" answer, but this did not correspond with what the management wanted. To alleviate this problem, management should make aware the definitions list for the tally sheets count that is taken on a daily basis. If there is a better understanding by the librarians doing the count then they may be able to be more accurate in how they record their answers.

Looking at the errors made by the librarians in more detail shows that there is a 19% error rate regarding reference questions. Once this is factored in to the study it is seen in Table 5 that over 60% of all questions asked of the librarians are reference. Table 8 shows that one reference question is being asked of each librarian every six minutes. It must also be said that there are directional questions being asked of the librarians also which may not take as long as the reference questions do, but still take time to answer. Staff is also expected to do other tasks at the desk one of which is selecting materials. The librarians may feel rushed in trying to get this done while helping the patrons with their questions.

Patterns of Use

As shown in Tables 3 and 6 there is a pattern for which times are busier at the information desk at the library. Starting with Mondays and Tuesdays these days are busier than the rest of the work week and may be attributed to students getting new assignments and people at businesses also needing information. These days are staffed higher than some of the other days during the work week, but they still remain busier. To alleviate these problems staffing changes may be needed to take the extra burden off of the librarians during these days. The management could experiment with moving people from later in the week to these two days. This may help to even out the questions per librarian, per hour.

The weekend is also a busy time for the library. This is most likely due to the fact that people are out of work and school and can easily get to the library at these times. Many students wait until the last minute to do their homework, and as can be seen Sunday becomes the busiest time in the library. More staff has already been added to try and help this problem, but has it been enough? Another person added on Sunday could bring the ratio of questions per librarian, per hour, down to ratios similar to other days so that staff wouldn't feel as hurried.

Another way to ease the burden on the librarians would be to add new individuals to the staff. Adding four hours to the busiest times on Mondays, Tuesdays, Saturdays, and Sundays would bring the number of questions asked per librarian, per hour to equal the rates of other times during the week. To do this would involve adding a person who works sixteen hours throughout the week. Will this be enough to keep stress levels

down? Staff already feel rushed in their jobs, and the rate of one reference question every six minutes is too much to keep up with. Adding another forty hours of staffing throughout the week would help to bring the questions asked per hour down to a more manageable level. Hours could be added to the busiest time first, and then allocated throughout the rest of the week to bring the number of questions asked per librarian, per hour down to a reasonable rate. What is a reasonable rate? This is an implication for further study to be done. We do know however that if the librarians devote 3-5 minutes of their time to answer a question, and they are answering a reference question every six minutes, that doesn't leave room for them to do much of anything else. Adding new staff could then help by raising the six minute mark to something that would be more manageable. This new staff member(s) could be either a professional librarian or an assistant librarian based upon what management needs. The main goal is to get more help with answering questions at the reference desk. The librarians could then help the patrons without having to feel rushed in performing their other duties.

One factor that should be looked at is the slow down in patrons over the summer months. This can be attributed to two things. First and foremost is school being out. Students add a great deal to the number of questions asked. Another reason is nicer weather. Many people do things outside during the warmer months of the year. These things may include bike riding, jogging, baseball, or a whole host of other activities. Not many people want to snuggle up under a warm blanket and read a good book when it's 85 degrees outside! The library tries to entice people into the building over the summer by having reading programs, but as can be seen in Tables 7 and 8 use of the library is still less than during the "school" months. A further study could find out if the library is

advertising their summer reading programs well enough, and if not how to do that better. It would be nice if the management could decrease staff during the summer months and use their hours during the winter, but they can't because they are given so many hours to use on a weekly basis and therefore can't decrease hours during the summer to help with the staffing during the busier months.

More research should be conducted to further show if patterns in this study hold true over time. Data should be collected for another three to five years and after the first year this new data is gathered it should be looked at to see if the patterns that exist in this study still remain the same. These observations should continue to be done as each new year of data is collected to see if the patterns continue. Once the five years of data gathering is completed it should be looked at to see if patterns exist between months throughout different years.

Finally, what are some possible things for the management to do in the future? They are as follows:

1) Shift workers from the slower hours during the week to the times that are busier.
2) Add staffing of 16 hours to the four busiest time slots to try to help make things less hectic then.
3) Add forty hours of staffing throughout the week so that the number of questions asked per librarian, per hour will be reduced.

Whichever way management chooses to deal with staffing problems, they must realize that their actions affect staff, and therefore their choice must be made carefully.

Appendix A

Location _____ **Daily Questions Asked** Day_____Date _____

Reference		Directional	
In-person	Telephone	In-person	Telephone
9:00 am-1:00 pm			
1:00-5:30 pm			
5:30-9:00 pm			

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Appendix B

Tally Survey

Please fill out the following set of questions. For each question indicate whether you think it's a "Reference" or "Directional" question. Please do not refer to any library materials that discuss tally sheets or do not ask anyone else how they would answer the questions. I would like you to answer these questions the way you feel they should be answered. Finally, please do not discuss how you answered these questions until the survey study I am doing is completed.

1) A patron comes up to the desk and asks, "How do I use an Internet search engine?"

   ------ Reference

   ------ Directional

2) Somebody calls up on the phone and asks, "How late is the library open tonight?"

   ------ Reference

   ------ Directional

3) Somebody asks, "How do I operate the printer?"

   ------ Reference

   ------ Directional

4) A customer asks, "Will you please place a reserve on John Grisham's novel entitled The Rainmaker for me?"

   ------- Reference

   ------- Directional

5) A customer asks, "Can you please help me find a phone number for a person in Chicago, Illinois?"

------ Reference

------ Directional

6) Somebody asks, "Can you please sign me up to use a computer in the computer center for this evening?"

------ Reference

------ Directional

7) A caller on the phone asks, "Can you please tell me who the author of The Great Gatsby is?"

------ Reference

------ Directional

8) A person asks, "Can you please show me where the magazines are?"

------ Reference

------ Directional

9) A customer comes in and asks, "Can you please get me information on local schools?" You look up Welcome to Heights High and reserve it.

------ Reference

------ Directional

10) A person asks, "May I please have the Plain Dealer for today?

------ Reference

------ Directional

11) Somebody calls on the phone and asks, "Can you please connect me to the computer center?" You transfer the call there.

------ Reference

------ Directional

12) Somebody comes up to the desk and returns a copy of USA Today to you.

------ Reference

------ Directional

Thank you for taking the time to complete this survey.

Appendix C

Re : Tally Sheet Survey

May 7, 1997

Dear Librarian:

I am currently completing my graduate work at the School of Library and Information Science at Kent State University. As part of the requirements for my master's degree I am conducting a study concerning reference desk staffing at the Cleveland Heights - University Heights Public Library and use of the daily tally sheets, and whether of not these sheets are being used in a consistent manner. The enclosed questionnaire elicits information that will help me to measure their knowledge of the correct use of these sheets. This information would be useful to both theorists and practitioners in the field of library and information science.

Confidentiality and anonymity are guaranteed as you do not need to sign your name to individual questionnaires; only the investigator has access to the survey data. There is no penalty of any kind if you should choose not to participate in this study or if you would withdraw from participation at any time. While your cooperation is essential to the

success of this study, it is, of course, voluntary. A copy of the results of the study will be available upon request.

If you have any further questions, please contact me at (216) 461-3259 or Dr. Richard Rubin, my research advisor, at (330) 672-2782. If you have any further questions regarding research at Kent State University you may contact Dr. M. Thomas Jones, at (330) 672-2851.

Thank you very much for your cooperation; it is much appreciated.

Sincerely,

Aaron Schlesinger

Graduate Student

ENDNOTES

1. Charles A. Bunge, "Reference Desk Staffing Patterns : Report of a Survey," RQ 26 (Winter 1986) : 173.

2. Diane R. Tebbetts, "What Library Services Really Cost," The Bottom Line 6 (Spring 1992) : 19-20.

3. Deborah Rinderknecht, "New Norms for Desk Staffing Adequacy : A Comparative Study," College and Research Libraries 53 (September 1992) : 429.

4. James R. Kuhlman, "On the Economics of Reference Service : Toward a Heuristic Model for an Uncertain World," The Reference Librarian 49-50 (1995) : 27.

5. Karen Storin Summerhill, "The High Cost of Reference : The Need to Reassess Services and Service Delivery," The Reference Librarian 43 (1994) : 71.

6. Ibid., 72.

7. Charles Terbille, "Queuing Theory and Reference Transactions," Reference Services Review 23 (Fall 1995) : 76-77.

8. Adrien P. Taylor, "Plan for Service : Professional and Non-Professional Reference Staff," The Reference Librarian 43 (1994) : 102-103.

9. Thompson Randloph Cummins, "Developing Personal and Staffing Standards," Library Administration & Management 6 (Fall 1992) : 183.

10. Marjorie E. Murfin, "Reference Volume, Staffing, and Accessibility," in *The Reference Assessment Manual* (Ann Arbor, MI : The Pierian Press, 1995), 86.

11. Ibid., 86.

12. Charles A. Bunge, "Reference Desk Staffing Patterns : Report of a Survey," RQ 26 (Winter 1986) : 173.

13. Ibid., 173.

14. Terry L. Weech, "Validity and Comparability of Public Library Data : A Commentary on the Output Measures for Public Libraries," Public Library Quarterly 8 no. 3-4 (1988) : 9.

15. Murfin , "Reference Volume, Staffing, And Accessibility," 87.

SELECTED BIBLIOGRAPHY

Bunge, Charles A. "Reference Desk Staffing Patterns : Report of a Survey." RQ 26 (Winter 1986): 171-179.

Cummins, Thompson R. "Developing Personal and Staffing Standards." Library Administration & Management. 6 (1992): 183.

Kuhlman, James R. "On the Economics of Reference Service : Toward a Heuristic Model for an Uncertain World." The Reference Librarian 49-50 (1995): 19-25.

Murfin, Marjorie E. "Reference Volume, Staffing and Accessibility." In *The Reference Assessment Manual*, ed. 86-92. Ann Arbor, MI: The Pierian Press, 1995.

Rinderknecht, Deborah. "New Norms for Desk Staffing Adequacy : A Comparative Study." College and Research Libraries 53 (September 1992): 429-36.

Summerhill, Karen Storin. "The High Cost of Reference : The Need to Reassess Services and Service Delivery." The Reference Librarian 43 (1994): 71-85.

Taylor, Adrien P. "Plan for Service : Professional and Non-Professional Reference Staff." The Reference Librarian. 43 (1994): 102-103.

Tebbetts, Diane R. "What Library Services Really Cost." The Bottom Line 6 (Spring 92): 19-25.

Terbille, Charles. "Queuing Theory and Reference Transactions." Reference Services Review 23 (Fall 1995): 76-77.

Weech, Terry L. "Validity and Comparability of Public Library Data : A Commentary on the Output Measures for Public Libraries." Public Library Quarterly 8 no. 3-4 (1988) 7-18.